i-STAT® TECHNICAL BULLETIN

Updating Analyzer Software: JAMMIT Utility

This Technical Bulletin contains the instructions for updating application software and CLEW in the i-STAT Portable Clinical Analyzer and Philips Medical Systems Blood Analysis Module. Unless you have a Central Data Station 3.1 or a PC with a Windows software below 95, we recommend that you use the JAMMLITE Utility rather than this JAMMIT Utility to update your analyzers and Blood Analysis Modules. If you have any questions, please call i-STAT Technical Support at (800) 366-8020.

SETTING UP THE COMPUTER

If using an i-STAT Central Data Station

if using an i-STAT Central Data Station (CDS) to update the Analyzers, follow the steps below for setting up the computer:

Step	Action
1	If updating handheld analyzers, transmit all data from the handhelds to the CDS. Data stored in a handheld analyzer will be lost after an application software update. **Attention:** If the Analyzer Customization Profile Utility is enabled in your Central Data Station, disable it prior to starting this process. The profile can be saved for restoration. For additional information on doing this, refer to the i-STAT Technical Bulletin, "Instructions for the Analyzer Customization Profile Utility" or in newer manuals, "Customization Utility" in the Central Data Station 4 section**.** Once Analyzers are updated, the function to restore the profile can be used to re-enable on-line customization, if desired. **However, be sure to first select the new CLEW in the profile.**
2	Connect a Modular Data Cable to the COM5 port on the back of the CDS. If your Central Data Station has one quad card (four ports for data cables), COM 5 is the innermost port closet to the fan. If your CDS has two quad cards, COM 5 is the innermost port on the bottom row of ports. If updating handheld analyzers, connect an IR Link to the opposite end of the cable.
3	Click on *Exit* to close the Central Data Station application.
4	Exit the Windows application following the instructions below for your platform: **Windows 3.1 platform:** Click on FILE and then EXIT in the Program Manager. **Windows 95/98 platform:** Click the Start button, select Shut Down…, then select Restart in DOS mode.

Abbott Point of Care

Abbott Point of Care Inc. • 104 Windsor Center Drive • East Windsor, NJ 08520 • (800) 366-8020
Art: 714318-00C Rev. Date: 08/23/06

Windows NT platform: Click the Start button, select Programs, then select Command Prompt.

With Windows 95/98 and NT platforms, you will be at the C:\WINDOWS prompt on exiting. Return to the root directory by typing cd\ and pressing the **Enter** key.

5 Place the JAMS diskette into the A: drive.

6 At the C:\> prompt, type **A:TRANSFER** and press the ENTER key. Wait for the DOS prompt C:\BINS> to appear. Ignore any "File Not Found" or "Directory Already Exists" messages that may appear.

7 At the C:\BINS> prompt, type **JAMMIT** and press the ENTER key. The i-STAT Configuration Utility will appear.

8 Proceed with the section of this document titled "Downloading to an Analyzer".

If you are using any other IBM PC compatible/ Point-of-Care Central Workstation

If using any other IBM PC compatible to update the analyzers, follow the steps below for setting up the computer:

Step	Action

1 If updating handheld analyzers, transmit all data from the handhelds to the CDS. Data stored in a handheld analyzer will be lost after an application software update.

2 Connect a Modular Data Cable to one of the 9-pin connector COM ports on the PC using the power adapter according to instructions supplied with it or the picture below. If updating handheld analyzers, connect an IR Link to the opposite end of the cable.

3 Exit all applications. You must be at the MS DOS prompt. (See Step 4 under "*If Using an i-STAT Central Data Station.*")

4 Place the JAMS diskette into the A: drive.

5 At the C:\> prompt, type **A:TRANSFER** and press the ENTER key. Wait for the DOS prompt C:\BINS> to appear. Ignore any "File Not Found" or "Directory Already Exists" messages that may appear.

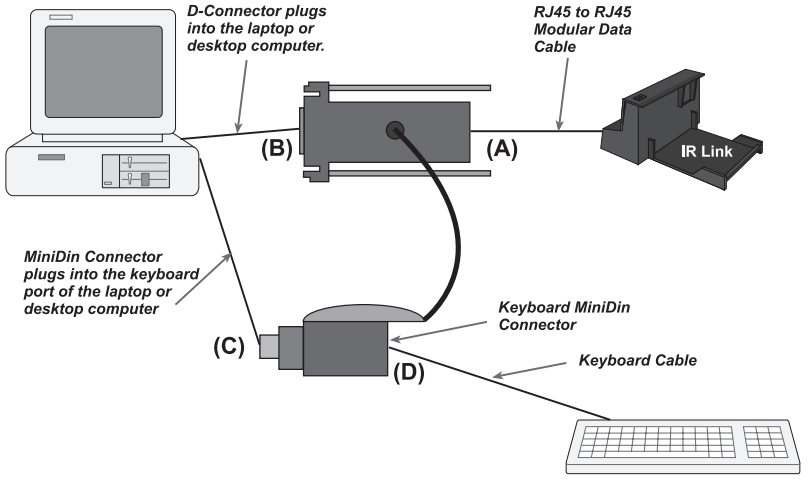
6 At the C:\BINS> prompt, type **JAMMIT** and press the ENTER key. The i-STAT Configuration Utility will appear.

7 Using the UP/DOWN arrow keys, highlight **Utility Setup** and press the ENTER key.

8 Using the UP/DOWN arrow keys, highlight **COM Port**. Using the RIGHT/LEFT arrow keys, select 1 or 2, depending on where the 9-pin connector is connected.

9 Using the UP/DOWN arrow keys, highlight **Return to Main Menu** and press the ENTER key.

10 Proceed with the section of this document titled "Downloading to an Analyzer".



DOWNLOADING SOFTWARE TO AN ANALYZER

Downloading to a handheld analyzer

Follow the steps below to download software to a handheld analyzer:

Step	Action
1	Highlight **Software** and press the ENTER key. The window **Select Files to Download** appears. The menu items **Application** and **CLEW** will automatically be set to the newest version.
2	Confirm the setting for **Application** and **CLEW** against the Product Update accompanying the diskette. If, under specific instruction from i-STAT, different versions are to be downloaded, highlight the menu item you are to change using the UP/DOWN arrow keys and use the LEFT/RIGHT arrow keys to set the proper version. **Note:** If the software upgrade is only a **CLEW**, select "None" for application.
3	Highlight **Download Selection** and press the ENTER key.
4	Follow the instructions on the computer screen. **Do not move the analyzer while download is in progress. Do not press the DIS key. When download is complete, run the Electronic Simulator in the Analyzer.** **Note:** On the handheld status page, the Application name is displayed on the line labeled **Ver:** and the CLEW is displayed on the line labeled **CLEW**.
5	After the update of all handheld analyzers is complete, the function to restore the Customization Profile can be used to re-enable on-line customization if desired. **Be sure to select the new CLEW in the profile first. Failure to do this will result in Quality Check Code 13.**

Downloading to a Blood Analysis Module

Follow the steps below to download software to a Blood Analysis Module:

Step	Action
1	Highlight **Utility Setup** and press ENTER key. The window Utility Setup appears.
2	Using the UP/DOWN arrow keys, highlight **Analyzer**. Using the RIGHT/LEFT arrow keys, select **HP Blood Analysis Module.**
3	Highlight **Return to Main Menu** and press the ENTER key.
4	Highlight **Software** and press the ENTER key. The window **Select Files to Download** appears. The menu items **Application** and **CLEW** will automatically be set to the newest version.
5	Confirm the setting for **Application** and **CLEW** against the Product Update accompanying the diskette. If, under specific instruction from i-STAT, different versions are to be downloaded, highlight the menu item you are to change using the UP/DOWN arrow keys and use the LEFT/RIGHT arrow keys to set the proper version. **Note:** If the software upgrade is only a **CLEW**, select "None" for application.
6	Highlight **Download Selection** and press the ENTER key.
7	Follow the instructions on the computer screen. **Do not unplug the module while the download is in progress.** **Note:** When the module is returned to a monitor, the CLEW can be viewed in the Blood Analysis Setup screen.

8	After the update of all modules is complete, the function to restore the Customization Profile can be used to re-enable on-line customization if desired. Be sure to select the new CLEW in the profile first.

Sending Software from handheld to handheld

To send software from one handheld analyzer to another, follow the instructions below:

Step	Action
1	Any updated analyzer can be used as the **Sending Analyzer**. Run the external Electronic Simulator on the Sending Analyzer.
2	Transmit all data from the analyzer being updated (the **Receiving Analyzer**) to the Central Data Station. Data stored in the handheld analyzer will be lost after an application software update.
3	With the Simulator test results showing on the display of the Sending Analyzer, press and hold the DIS key and press the soft key for MENU. This displays the Utility Menu.
4	In the Utility Menu, select 3 - **Send Software**. The display will show the JAMS version and the CLEW in this analyzer. Verify that these are the appropriate versions. The analyzer screen will also say “Waiting to send”.
5	Set both analyzers on a flat surface and align the Infrared Light-Emitting Diode (IR LED) windows so they directly face each other. (Refer to the analyzer picture on page 2-2 of the i-STAT System Manual for the location of the IR LED.)
6	On the Receiving Analyzer, make sure the display is off. Press and hold the * key and press the **DIS** key. The Sending analyzer will begin sending software to the Receiving Analyzer. The display on the Sending Analyzer will change from “Waiting to send” to “Sending...”, and a countdown bar will be displayed. **Do not move the analyzers while the software is being sent.**
7	When the display of the Sending Analyzer changes back to the Electronic Simulator result, the sending of software is complete. **Do not press the DIS key. Run the Electronic Simulator on the Receiving Analyzer.**
8	To update software in another analyzer, repeat these instructions from Step 2.

TROUBLESHOOTING

Error message relating to the IR Link

If you are using any other IBM PC compatible computer, another application relating to the may be monopolizing the COM port. Close all other open applications. Ensure the utility is set to use the proper COM port in the Utility Setup option from the main menu. If the setting is proper, quit the Utility, turn off the computer, unplug and replug the IR Link, restart the computer, and try the download again.

UPDATE .cfg not found

Ensure you run A:TRANSFER from an i-STAT software diskette. Ensure you run **JAMMIT** from C:\BINS>

Block count stops incrementing

If the block count on the status line of the computer screen stops incrementing for more than 10 seconds during a download, press the **Esc** key to abort the download. If updating an handheld analyzer, take it out of the IR Link, remove and replace the batteries to reset. If updating a Blood Analysis Module, unplug the cable and plug it in again.

This can happen if you try to run **JAMMIT** under Microsoft Windows (Windows 3.1 or 95/98 platform). You must exit Windows and run the program in the DOS mode. Try the download again.

Nothing happens OR Handheld displays results or error message when *DIS is pressed as prompted

Remove and replace the batteries to reset the handheld. Ensure the handheld display is off. Place the handheld back in the cradle, ensure it is properly seated. Press and hold the * key for 2 seconds, then press the **DIS** key while keeping the * key pressed.

LEDs on the module are OFF

Possibly the cable or the COM port is defective. Try another cable and/or configure another port to “HP Blood Analysis Module” and try again.

Quality Check Code 13 - Invalid Expired CLEW after on-line customization is restored

If this quality check code occurs after successfully downloading new software and restoring on-line customization, the CLEW has not been updated to the new version in the Customization Profile. Refer to i-STAT Technical Bulletin “Instructions for the Analyzer Customization Profile Utility.

i-STAT is a registered trademark of Abbott Laboratories.